

REMARKS

Claims 1-13 are all the claims pending in the application.

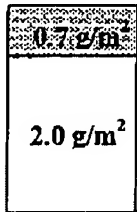
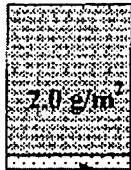
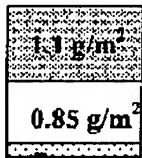
Applicants thank the Examiner for the courtesies extended during the telephone Interview conducted on February 24, 2006. In view thereof, Applicants submit the following in response to the Final Office Action dated October 19, 2006.

Claims 1-13 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Miyake et al in view of Kitson et al. The Examiner states that Applicants' arguments in the Amendment filed on July 27, 2005 (and incorporated by reference in the Supplemental Amendment filed on August 4, 2005) and comparative evidence in the specification have been considered but are not persuasive because the comparative examples are not of proper scope, weight and character to overcome the *prima facie* showing of obviousness. Specifically, the Examiner states that Comparative Example 1 in the specification uses a m-cresol/p-cresol novolak resin having a lower molecular weight than the phenol/m-cresol/p-cresol of the present invention and therefore the skilled artisan would expect inferior results such as chemical resistance, print durability and sensitivity with respect to the comparative example.

Applicants respectfully traverse the rejection and submit that the cited references do not teach or suggest the presently claimed invention based on the following.

The layer structures and characteristics of the upper layer (image forming layer), lower layer and undercoating layer of Kitson et al, Miyake et al and the present invention are shown in the Table below. The column and line numbers of the disclosure of the references and of the present specification where the components of these layer structures is provided in parentheses in the Table below.

TABLE

	Kitson (USP No. 6,858,359 B2)	Miyake (USP No. 6,573,022 B1)	Present invention
			
Characteristics of Upper Layer	m/p NVK (Mw>10,000), functionalized NVK (col. 8, line 40 to col. 9, l. 8) (col. 17, l. 35 to col. 18, l. 35)	m/p, Ph/p, NVK (col. 14, l. 61 to col. 15, l. 4) (col. 40, l. 23 to col. 47, l. 65) also contained sulfone compound	NVK type phenolic resin containing phenol as a structural unit (p. 6, l. 6 to p.13, l. 10) (p. 83)
Under Layer	Underlayer (col. 3, l. 60 to col. 7, l. 3)	None	Lower layer (p. 45, l. 14 to p. 46, l. 20)
Undercoating Layer	None	Organic subing layer (col. 36, l. 19 to col. 36, l. 24)	Organic undercoating layer (p. 52, l. 17 to p. 55 l. 12)

From the above Table, it can be seen that there is a concrete difference between the lower layer and the undercoating layer of the present invention and the prior art, which is determined by the coating amount.

It is also understood that there are significant differences between the image forming layers of the three inventions.

Regarding the issue of the composition of the novolak resin, an m/p novolak resin which does not contain phenol as a constituent component is preferably used in each of Kitson et al and Miyake et al (see column 17, line 35 to column 18, line 35 of Kitson et al and column 40, line 23 to column 47, line 65 of Miyake et al). This is because a person of ordinary skill in the art would expect that the inclusion of phenol would not be preferable from the standpoints of reduction of development latitude and deterioration of printing durability due to an excessive

increase in the hydrophilicity of the film. In fact it is shown in the present specification, in Comparative Example 2, that development latitude and printing durability are deteriorated when a phenol-containing novolak resin is used in the upper layer without providing the lower layer (the layer structure of Miyake et al). Accordingly, Applicants submit that it has already been demonstrated that the effects of the present invention cannot be obtained by using the upper layer of the present invention on the undercoating layer of Miyake et al.

As indicated by the Examiner, there is indeed a tendency for printing durability to increase when the molecular weight of the novolak resin is increased or the novolak resin is made rich in p-cresol. This is also clear from the fact that the claims of Kitson et al recite the use of a novolak resin having a molecular weight greater than 10,000 and a novolak resin that is rich in p-cresol (column 8, line 40 to column 9, line 8). However, in the present invention, the physical change in both interfaces of the film (i.e., multiple layers are essential) and the change in density of the film (which is even better when m-cresol is included), which result from a three-dimensional structural change in the novolak resin due to the inclusion of phenol, are more important factors in significantly improving development latitude and printing durability than the molecular weight of the novolak resin or an increase in hydrogen bonds due to a large content of p-cresol. Thus, the operational configuration of the present invention is different from the operational configuration based on an increase in molecular weight of the novolak resin or a novolak resin that is rich in p-cresol, which is used in Kitson et al. In fact, it has already been demonstrated that improved development latitude and printing durability are not exhibited without multiple layers, and it is clear from the Examples and Comparative Examples of the present specification that printing durability is exhibited even if the novolak

resin is greater than 10 000, and that printing durability is not exhibited even if the novolak resin is rich in p-cresol (m/p = 50/50). In other words, it has been demonstrated that the effects of the invention cannot be obtained even if a novolak resin suggested by Kitson et al is used in the lower layer of the present invention.

For at least these two reason set forth above, the present invention could not be achieved based on either of Kitson et al or Miyake et al, nor by combining the operational configurations thereof.

Moreover, it is also a characteristic of the present invention that the phenol-containing novolak resin provides good performance with respect to sensitivity. This advantage is not taught, suggested or even mentioned by Miyake et al or Kitson et al. Thus, one of ordinary skill in the art would not have had a reasonable expectation of achieving the unexpected results of the present invention. For this additional reasons, the present invention is not rendered obvious by a combination of Miyake and Kitson.

Further, Applicants provide a Declaration under 37 C.F.R. § 1.132 in which additional Comparative Examples 2 to 5 are provided to rebut the Examiner's position regarding Comparative Example 1 in the present specification. In the Declaration, Comparative Examples 2 to 5 were prepared in the same manner as in Example 1 of the specification of the present application, except that comparative novolak resins shown in Table A of the Declaration were used in place of the specific novolak resin used in Example 1. Obtained planographic printing plate precursors of Comparative Examples 2 to 5 were processed and evaluated in the same manner as in Example 1 described in the specification of the present application and the results are provided in Table 1 with the results of Examples 1 to 7 and Comparative Example 1 from

the specification of the present application. The results show that the planographic printing plate precursors of the present invention were able to record at a higher sensitivity and were more excellent in development latitude, printing durability and chemical resistance in comparison with Comparative Example 1 to 4 in which novolak resins containing no phenol or m-cresol in an amount of less than 10% by mole as structural units were used. Further, it was found that the planographic printing plate precursors of Comparative Examples 2 to 5 in which novolak resins having an equal or higher molecular weight than the invention were used, exhibited inferior sensitivity, printing durability and chemical resistance. Thus, the Declaration establishes that the present invention provides unexpectedly superior results when compared to the prior art and is therefore patentable over the cited art of record.

Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 103.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Response under 37 C.F.R. § 1.116
U.S. App. Ser. No. 10/759,199

Atty. Dckt. No. Q79452

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

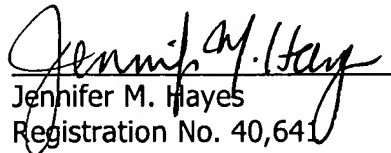
Respectfully submitted,

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